

Title (en)

PUPIL DETECTION DEVICE AND PUPIL DETECTION METHOD

Title (de)

PUPILLENERKENNUNGSVORRICHTUNG UND PUPILLENERKENNUNGSVERFAHREN

Title (fr)

DISPOSITIF DE DÉTECTION DE PUPILLE ET PROCÉDÉ DE DÉTECTION DE PUPILLE

Publication

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Application

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Priority

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Abstract (en)

A pupil detection apparatus and pupil detection method are provided that enable a high-accuracy detection result to be selected and output even when a gray scale image using near-infrared light is used. In a pupil detection apparatus (100), based on a calculated value of red-eye occurrence intensity that is relative brightness of brightness within a first pupil image detected by a pupil detection section (103) with respect to brightness of a peripheral image outside the first pupil image, and a correlation characteristic of red-eye occurrence intensity and a pupil detection accuracy value, a switching determination section (105) selectively outputs a detection result of the first pupil image or a detection result of a second pupil image detected by a pupil detection section (104). The pupil detection apparatus (100) has a first imaging pair comprising an imaging section (111) and an illumination section (112) separated by separation distance d1, and a second imaging pair whose separation distance d2 is greater than that of the first imaging pair. One pupil detection section (103) uses an image captured by the first imaging pair, and the other pupil detection section (104) uses an image captured by the second imaging pair.

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